

ABSTRACT

An improved cutting tool insert and a method for the preparation of such cutting tool insert, having a sintered alumina and silicon carbide whisker composite material body, comprising the steps of milling and mixing the powdered starting materials of said composite material and forming said material into a preformed workpiece, heating up said workpiece at a heating rate of from about 20 to about 60°C per minute to a sintering temperature of between from about 1600 to about 2300°C, and holding at said sintering temperature for a holding time of from about 5 to about 60 minutes at a pressure of between from about 20 to about 100 MPa.